

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
SAN FRANCISCO BAY REGION

ORDER NO. 92-079

REISSUANCE OF WASTE DISCHARGE REQUIREMENTS FOR:

DEPARTMENT OF PUBLIC WORKS
COUNTY OF MARIN
GALLINAS CREEK DREDGE MATERIAL DISPOSAL

The California Regional Water Quality Control Board, San Francisco Bay Region, finds that:

1. The Marin County Department of Public Works (hereinafter the Discharger) submitted a Report of Waste Discharge, dated June 23, 1992, for a discharge from its dredged material disposal site. The dredge disposal site, referred to as the "North Cell", is located on property owned by the County of Marin (Attachment A). The North Cell is adjacent to the dredging site on Gallinas Creek (Attachment B). The Discharger was last issued Waste Discharge Requirements for this site in 1972. The Discharger last used the site for dredged sediment disposal in 1981.
2. The proposed dredging activity is regulated under Section 10 of the federal Rivers and Harbors Act.
3. A waiver of Water Quality Certification, issued June 21, 1991, addressed the dredging of Gallinas Creek of 158,000 cubic yards of sediment. However that waiver did not address the discharge of effluent from sediments at the North Cell location. Thus, the waiver is neither adequate nor consistent with the plans and policies of the Regional Board.
4. The proposed activity will result in a discharge to waters of the State and Water Quality Certification is waived by issuance of these Requirements.
5. The Discharger plans to discharge an average of 750,000 gallons per day (gpd) of return-flow effluent. Effluent will be discharged from a weir located on the east side of the North Cell. The design flow for the facility is 2 million gpd. Sediment will be pumped, or loaded via clam-shell to the western side of the North Cell.
6. These requirements are for the discharge of return-flow water from dredge material handling and disposal operations.
7. The beneficial uses of Gallinas Creek are:
 - a. Water contact recreation.

- b. Non-contact water recreation
- c. Wildlife habitat
- d. Preservation of rare and endangered species
- e. Cold and warm water fish habitat
- f. Navigation
- g. Preservation of Rare and endangered species
- h. Estuarine Habitat

8. The Board, on December 17, 1986, adopted a revised Water Quality Control Plan (Basin Plan) which contains water quality objectives for Gallinas Creek. The requirements of this document are consistent with that Plan.
9. The action to adopt waste discharge requirements for this facility is exempt from the provisions of the California Environmental Quality Act (CEQA), in accordance with Section 15304, Title 14, California Administrative Code.
10. The Board has notified the Discharger and interested agencies and persons of its intent to prescribe waste discharge requirements for this discharge.
11. The Board, in a public meeting, heard and considered all the comments pertaining to the discharge.
12. IT IS HEREBY ORDERED that the County of Marin, Department of Public Works, meet the provisions contained in Division 7 of the California Water Code and regulations adopted thereunder, shall comply with the following:

A. Discharge Prohibitions:

1. The direct discharge of wastes (including dredged sediment material) to surface waters or surface water drainage courses is prohibited.
2. The discharge shall not cause degradation of any water supply.
3. The discharge shall remain within the designated disposal area at all times.
4. The dredge and disposal shall not cause a nuisance as defined in Section 13050(m) of the California Water Code.

B. Specifications

1. At no point within a containment area or cell shall the elevation of sediment, supernatant water or slurry exceed that of the perimeter levees, berms or other containment structures.
2. A discharge weir, located at the southeastern corner of the North

Cell, will be connected to a pipe, 43 feet in length, which will convey the return flow effluent to the banks of Gallinas Creek.

C. Effluent Limitations

Wastewater (decant water, return water) discharged at the previously described discharge weir shall not exceed the following limits of quality at any time:

- | | |
|--------------------------|-----------|
| (i) pH: | 6.5 - 8.5 |
| (ii) Settleable matter: | 1.0 ml/hr |
| (iii) Dissolved sulfide: | 0.1 mg/l |

D. Receiving Water Limitations

1. The dredging and/or disposal of waste (i.e., sediments) shall not cause:
 - a. Floating, suspended or deposited macroscopic particulate matter or foam in waters of the State at any place more than 100 feet from the dredge or point of discharge of the return flow.
 - b. Bottom deposits or aquatic growth in waters of the State at any place.
 - c. Alteration of apparent color beyond present natural background levels in waters of the State at any place more than 100 feet from the dredge or point of discharge of the return flow.
 - d. Visible floating, suspended, or deposited oil or other products of petroleum origin in waters of the State at any place.
 - e. Waters of the State to exceed the following quality limits at any point:

Dissolved Oxygen	5.0 mg/l minimum When natural factors cause lesser concentrations, then this discharge shall not cause further reduction in the concentration of dissolved oxygen.
------------------	-----------------------------------------------------------------------------------------------------------------------------------------------------------------------

Dissolved Sulfide	0.1 mg/l maximum.
-------------------	-------------------

pH	A variation of natural ambient pH by more than 0.2 pH units.
----	--------------------------------------------------------------

Toxic or other deleterious substances	None shall be present in concentrations
---------------------------------------	-----------------------------------------

or quantities which may cause deleterious effects on aquatic biota, wildlife or waterfowl, or which render any of these unfit for human consumption either at levels created in the receiving waters or as a result of biological concentrations.

2. Turbidity of the waters of the State at any point beyond the 100 feet of the discharge of the return flow shall not increase above background levels by more than the following:

<u>Receiving Waters Background</u>	<u>Incremental Increase</u>
<50 units	5 Units, maximum
50-100 units	10 units, maximum
>100 units	10% of background, maximum

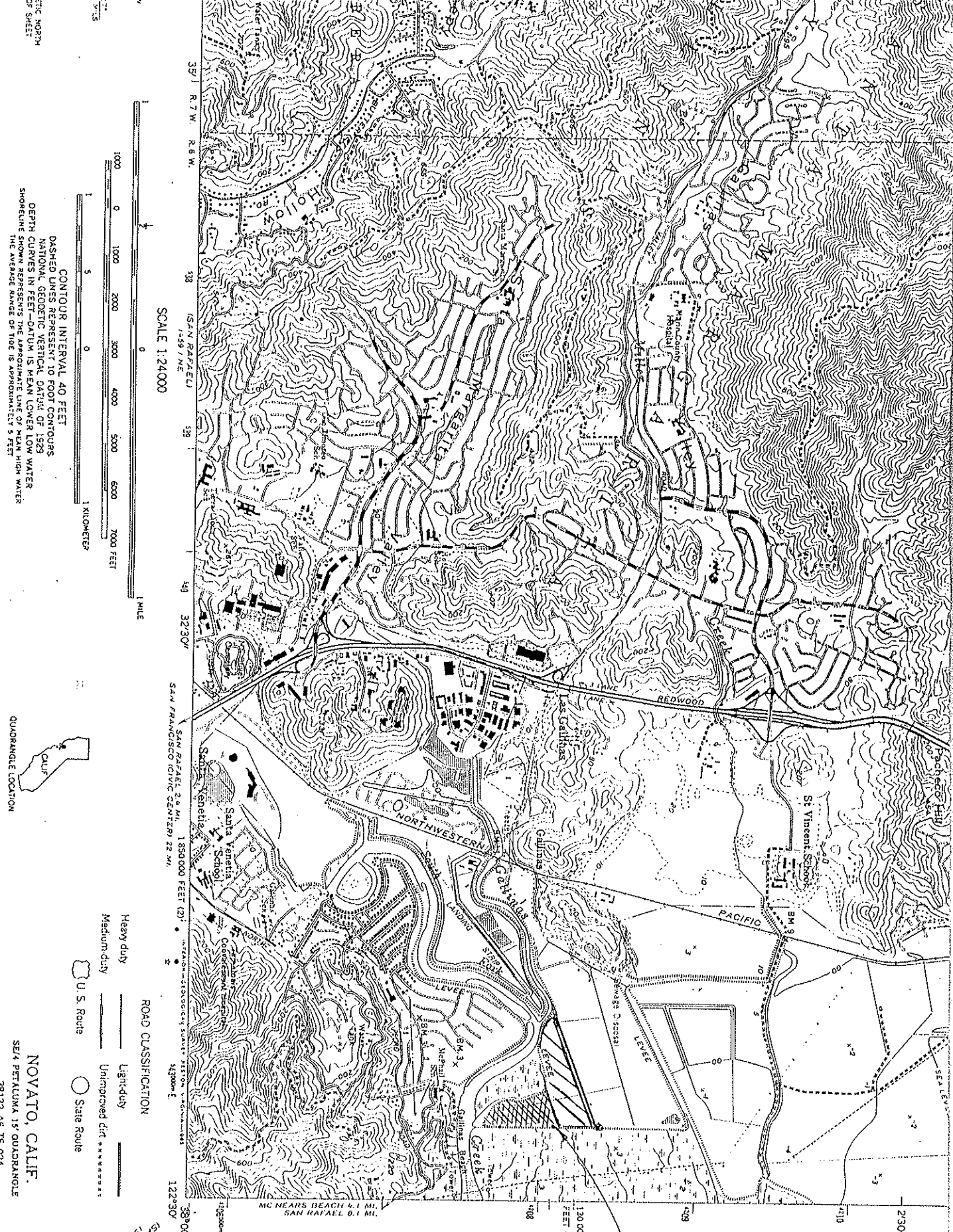
- C. The groundwater shall not be degraded as a result of the sediment disposal and handling operation.

D. PROVISIONS

1. The discharge of silt, sand, soil, clay or other earthen materials from dredging, construction or any other on-shore operation in quantities sufficient to cause deleterious bottom deposits or turbidity or discoloration in excess of natural background levels in surface waters is prohibited.
2. Dredging operations shall cease immediately whenever violations of requirements are detected through implementation of the Self-Monitoring Program (SMP) and operations shall not resume until alternative methods of compliance are provided. The discharger shall notify the Regional Board immediately whenever violations are detected and operations shall not resume until the Executive Officer of the Regional Board staff has approved the corrective action plan that will provide alternative methods of compliance.
3. The discharger shall file with the Regional Board monthly self-monitoring reports performed according to the attached Self-Monitoring Program issued by the Executive Officer or subsequent revisions.
4. All reports pursuant to these Provisions shall be prepared under the supervision of a registered civil engineer or certified engineering geologist.
5. The discharger shall ensure that the foundation of the site, the levees surrounding

the site, and the structures which control leachate, decant water, or surface drainage, are designed, constructed and maintained to withstand conditions generated during the maximum probable earthquake.

6. The discharger shall install any additional leachate monitoring devices required to fulfill the terms of any Self-Monitoring Program issued to the discharger in order that the Board may evaluate compliance with the conditions of this order.
7. The discharge of any hazardous, designated or non-hazardous waste as defined in Title 23, Division 3, Chapter 15 of the California Administrative Code, to the disposal site is prohibited. Only dredged material that has been demonstrated to be non-hazardous may be discharged to the disposal site.
8. The Discharger shall remove and relocate any wastes which are discharged at this site in violation of these requirements.
9. The discharger shall file with this Board a report of any material change or proposed change in the character, location, or quantity of this waste discharge. For the purpose of these requirements, this includes any proposed change in the boundaries of the disposal areas or the ownership of the site.
10. The discharger shall maintain a copy of this Order at the site so as to be available at all times to site operating personnel.
11. The property owner and site operator is considered to have full responsibility for correcting any and all problems which arise in the event of a failure which results in an unauthorized release of waste or wastewater.
12. The discharger shall maintain all devices or designed features installed in accordance with this Order such that they function without interruption for the life of the operation.
13. The ultimate off-site disposal of the dried dredge material is subject to the approval of the Executive Officer. This approval shall be based upon a demonstration that the ultimate disposal will occur at a site which has Waste Discharge Requirements (WDR) from this Regional Board or a site that has received a waiver of WDR.
14. The Discharger shall permit the Regional Board or its authorized representative, upon presentation of identification:
 - a. Entry on to the premises on which wastes are located or in which records are kept.
 - b. Access to copy any records required to be kept under the terms and conditions of this Order.



CONTOUR INTERVAL 40 FEET
 DASHED LINES REPRESENT 10 FOOT CONTOURS
 NATIONAL GEODETIC SURVEY DATA OF 1929
 DEPTH CURVES IN FEET GATHENS MEAN LOWER LOW WATER
 SHORELINE SHOWN REPRESENTS THE AVERAGE OF MEAN HIGH WATER
 THE AVERAGE RANGE OF TIDE IS APPROXIMATELY 5 FEET

ROAD CLASSIFICATION
 Heavy duty ————
 Medium-duty ————
 Unimproved dirt ————
 U. S. Route ————
 State Route ————

NOVATO, CALIF.
 SE/4 PETALUMA 15' QUADRANGLE
 38122-45-TF-024



Revisions shown in purple and woodland compiled from
 aerial photographs taken 1979 and other source data.
 This information not field checked. Map edition 1980
 Purple tint indicates extension of urban areas

THIS MAP COMPILES WITH NATIONAL MAP ACCURACY STANDARDS
 FOR SALE BY U. S. GEOLOGICAL SURVEY, DENVER, COLORADO 80225, OR RESTON, VIRGINIA 22092
 A FOLDER DESCRIBING TOPOGRAPHIC MAPS AND SYMBOLS IS AVAILABLE ON REQUEST

DISCHARGE
 WEIR

Attachment A



MILE



ROAD CLASSIFICATION

Heavy duty	—————	Light-duty	—————
Medium-duty	—————	Unimproved dirt	-----

U. S. Route
 State Route

NOVATO, CALIF.

SE/4 PETALUMA 15' QUADRANGLE

38122-A5-TF-024

1954

PHOTOREVISED 1980

DMA 1460 II SE-SERIES V895

Revisions shown in purple and woodland compiled from aerial photographs taken 1979 and other source data. This information not field checked. Map edited 1980.

Purple tint indicates extension of urban areas

Attachment B

**CALIFORNIA REGIONAL WATER QUALITY CONTROL PLAN
SAN FRANCISCO BAY REGION**

SELF-MONITORING PROGRAM

FOR

**COUNTY OF MARIN
DEPARTMENT OF PUBLIC WORKS
DREDGE DISPOSAL SITE**

Part A

Refer to applicable sections of Part A.

Delete Sections:

D.1.a., D.2.a., D.2.d., D.2.e., D.2.g., D.2.h., D.3., E.4., F.3., F.4. F. 5., G.5.

Insert Sections:

D.2.a. Samples of effluent and receiving waters shall be collected at times coincident with influent sampling unless otherwise stipulated. The Regional Board or Executive Officer may approve an alternative sampling plan if it is demonstrated that expected operating conditions warrant a deviation from the standard sampling plan.

D.2.d. If analytical results are received showing any instantaneous maximum limit is exceeded, a confirmation sample shall be taken within 24 hours and results known within 24 hours of the sampling.

D.2.e. If any instantaneous maximum limit for a constituent is exceeded in the confirmation sample described in Section D.2.d., the discharge shall be terminated until the cause of the violation is found and corrected. For other violations, the discharger shall implement procedures that are acceptable to the Executive Officer on a case by case basis.

ATTACHMENT C.

**CALIFORNIA REGIONAL WATER QUALITY CONTROL PLAN
SAN FRANCISCO BAY REGION**

SELF-MONITORING PROGRAM

**FOR
COUNTY OF MARIN
DEPARTMENT OF PUBLIC WORKS
DREDGE DISPOSAL SITE**

Part B

This portion of the Self Monitoring Program (SMP) contains terms and definitions specific to the permitted discharge.

I. DESCRIPTION OF SAMPLING STATIONS

A. RECEIVING WATERS (Return Flow)


- A1. A point shall be at the point of discharge to the receiving water.
- B1. The sampling point shall be within 50 feet of the discharge to the receiving water. Sample to be taken at mid-depth of water column and at slack tide.
- AU. Sampling point shall be at least 75 feet upstream of the discharge to the receiving water. Sample to be taken at mid-depth of water column and taken at slack tide.

II. LAND OBSERVATIONS

- L1-
- L10 Visual observations at points equidistant along the perimeter levee not to exceed 1,000 feet spacing.

I, Steven R. Ritchie, Executive Officer, do hereby certify that the foregoing Self-Monitoring Program:

1. Has been developed in accordance with the procedures set forth in this Regional Board's Resolution No. 73-16 in order to obtain data and document compliance with waste discharge requirements established in Regional Board Order No. 92-079.
2. Was adopted by the Board on July 15, 1992.
3. May be reviewed at any time subsequent to the effective date upon written notice from the Executive Officer or request from the discharger, and revisions will be ordered by Executive Officer or Regional Board.


Steven R. Ritchie
Executive Officer

III. SCHEDULE OF SAMPLING, ANALYSIS AND OBSERVATIONS

A. The following table is to be implemented as a principle part of the SMP and is written specifically for the discharge described in this permit.

	Stations A1 & AU.	Station B1.	Stations L1-L10.
Type of Sample	Grab	Grab	Observations
<u>Perimeter:</u>			
Settleable Matter (ml/1-hr)	Daily	Weekly/ per Episodet	
pH	Daily	Weekly/ per Episodet	
Dissolved Sulfide (mg/l)	Daily	Weekly/ per Episodet*	
Dissolved Oxygen (mg/l)	--	Weekly/ per Episodet	
Temperature (°C)		Weekly/ per Episodet	
Turbidity (JTU)		Weekly/ per Episodet	
Standard Observations			Weekly/ per Episodet
Bioassay (96-hr)	Bimonthly**	---	
Metals (As, Cd, Cr, Cu, Pb, Hg, Ni, Se, Ag, Zn)	Weekly/per Episodet	--	

* To be performed if D.O. drops below 5.0 mg/l at Station A.

** Test to be carried out using standard ASTM protocol for Pacific Oyster (*Crassostea gigas*) larvae or other species as approved by the Executive Officer.

† To be carried out for each dredging episode or weekly if dredging duration is longer than one week.